

Requested Patent: WO0133448A1

Title:

REVERSE AUCTION PROCESSING METHOD USING COMPUTER NETWORK
SYSTEM ;

Abstracted Patent: WO0133448 ;

Publication Date: 2001-05-10 ;

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Application Number: WO2000KR01220 20001027 ;

Priority Number(s): KR19990047925 19991101 ;

IPC Classification: G06F17/60 ;

Equivalents: AU1060901, KR2001044878, TW494339 ;

ABSTRACT:

A reverse auction method in conducting an auction on-line using a computer network system is provided. The method includes the steps of at least one buyer registering product purchase information, including the specifications of a product the buyer wants to buy, in a server computer; the server computer giving notices corresponding to the product purchase information of the buyer to at least one seller computer; setting an area in the server computer for a bid to the buyer; the seller making a bid by registering sales bid information, including the specifications of a product to be sold, in the area for the bid; and the buyer deciding whether or not to purchase a product, after checking the sales information of sellers registered in the area for the bid. According to the method, an auction for a product is conducted in a separate cyber area for the buyer's product specifications, and the buyer can choose a product with more appropriate specifications at a cheaper price.

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
10 May 2001 (10.05.2001)

PCT

(10) International Publication Number
WO 01/33448 A1

(51) International Patent Classification⁷: G06F 17/60

(21) International Application Number: PCT/KR00/01220

(22) International Filing Date: 27 October 2000 (27.10.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1999/47925 1 November 1999 (01.11.1999) KR

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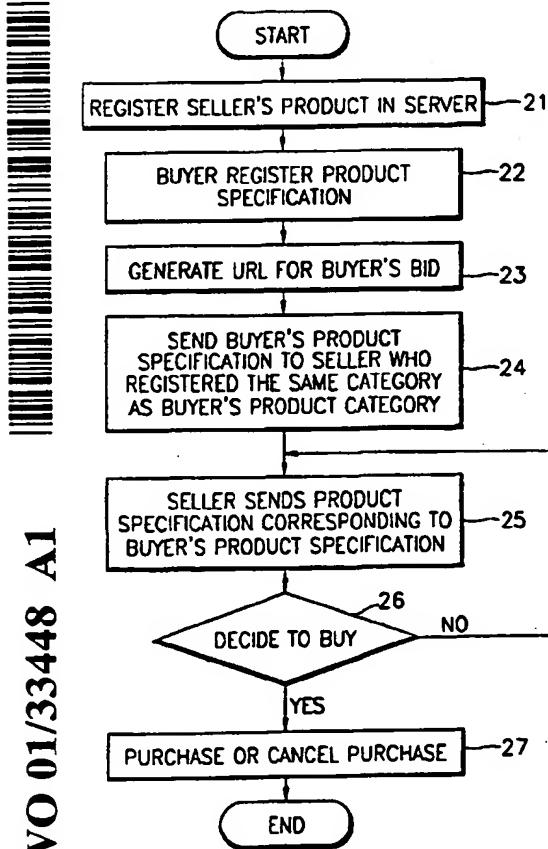
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European

[Continued on next page]

(54) Title: REVERSE AUCTION PROCESSING METHOD USING COMPUTER NETWORK SYSTEM



(57) Abstract: A reverse auction method in conducting an auction on-line using a computer network system is provided. The method includes the steps of at least one buyer registering product purchase information, including the specifications of a product the buyer wants to buy, in a server computer; the server computer giving notices corresponding to the product purchase information of the buyer to at least one seller computer; setting an area in the server computer for a bid to the buyer; the seller making a bid by registering sales bid information, including the specifications of a product to be sold, in the area for the bid; and the buyer deciding whether or not to purchase a product, after checking the sales information of sellers registered in the area for the bid. According to the method, an auction for a product is conducted in a separate cyber area for the buyer's product specifications, and the buyer can choose a product with more appropriate specifications at a cheaper price.

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patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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Published:

— *With international search report.*

REVERSE AUCTION PROCESSING METHOD USING COMPUTER NETWORK SYSTEM

Technical Field

5 The present invention relates to a method of performing an online auction using a computer network system, and more particularly, to a reverse auction processing method using a computer network system, in which a buyer provides product specifications, and a seller makes a bid for the product specifications.

10 Background Art

In an auction, a seller registers a product to be auctioned, bidders bid on products, and the bidder whose bid is the highest may purchase the auctioned product. However, in such an auction, the buyer has to choose only the product which the seller registered, and the buyer may be unable 15 to buy a product which meets the specifications the buyer wants. Therefore, an auction processing system in which, apart from a seller's unilateral offering of a product, the buyer actively proposes the product he wants and an auction is conducted based on the desired product, is required.

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Disclosure of the Invention

To solve the above problems, it is an objective of the present invention to provide a reverse auction processing method in which an auction is conducted on-line among computers connected through a 25 communication network, using communication networks such as the Internet, and when a buyer proposes product specifications, sellers make bids for the purchase.

To accomplish the above object of the present invention, there is provided a reverse auction processing method for an auction which is 30 conducted through a communication network, the method having the steps of at least one buyer registering product purchase information, including

the specifications of a product the buyer wants to buy, in a server computer; the server computer giving notices corresponding to the product purchase information of the buyer to at least one seller computer; setting an area in the server computer for a bid to the buyer; the seller making a bid by 5 registering sales bid information, including the specifications of a product to be sold, in the area for the bid; and the buyer deciding whether or not to purchase a product, after checking the sales information of sellers registered in the area for the bid.

It is preferable that the method further includes the steps of the 10 server computer receiving registration of product sales information, including the specifications of a product which can be sold, from the seller; and sending product purchase information corresponding to the product sales information to the registered sellers.

It is preferable that the method further includes the step of the server 15 computer providing information on a product, which meets the specifications of a product provided by the buyer, among unsold products remaining from normal auctions, to the buyer.

It is preferable that the method further includes the step of paying for 20 the purchase of the product which the buyer has decided to buy.

It is preferable that the buyer who decided to buy the product pays money for the purchase of the product to the server computer operator through the communication network, and the server computer operator pays a predetermined amount of money to the corresponding seller.

25 Brief Description of the Drawings

FIG. 1 illustrates an example of the structure of a computer network system for performing the present invention;

FIG. 2 is a flowchart of an example of a reverse auction processing method according to the present invention; and

30 FIG. 3A is an example of a database for storing seller's product specification information, FIG. 3B is an example of a database for storing

buyer's product specification information, and FIG. 3C is an example of a database for storing product information of the seller who makes a bid for the product of a predetermined buyer.

5 Best mode for carrying out the Invention

Hereinafter, embodiments of the present invention will be described in detail with reference to the attached drawings. The present invention is not restricted to the following embodiments, and many variations are possible within the spirit and scope of the present invention. The 10 embodiments of the present invention are provided in order to more completely explain the present invention to anyone skilled in the art.

FIG. 1 illustrates the structure of a computer network system for performing the present invention. A server computer 11 belongs to an auctioneer company which conducts an online auction. Buyer computers 14 are owned by those who purchase products in the auction conducted by the server computer 11. Seller computers 12, which are used by sellers who provide products for the auction, are connected to the server computer 11 through the communication network 13. A database for storing data for the auction and a program for processing the auction are stored in the 15 server computer.

The buyer computers 14 and seller computers 12 connected to the communication network 13 have Internet browsers (for example, Netscape, and Internet Explorer) which can display web contents encoded in Hyper Text Markup Language (HTML). The web browser makes each computer 20 access and display the content of an online auction HTML templet in the server computer 11. The HTML templet of the server computer 11 has a main web page to be displayed for online auction users such as the seller computers 14.

FIG. 2 is a flowchart of an example of a reverse auction processing 25 method according to the present invention.

A seller accesses the main home page of the server computer 11

through the browser of the seller computer 12 and registers a product to be auctioned in step 21. In registration, the seller can input only the category of the product to sell, or can input detailed information, including the product name, the product specification, the price, sales area, the auction closing date, etc. The server computer 11 stores this sales information in a database.

FIG. 3A is an example of a database for storing seller's product specification information. The server computer 11 has categories set by the kinds of product, and the seller has registered the category of the product which he can provide for the auction. The seller can also register detailed information, including the product name, specifications, etc.

Meanwhile, a buyer who wants to buy a product accesses the server computer 11 through the buyer computer 14 and inputs the product he wants to buy and detailed product specifications in step 22. FIG. 3B is an example of a database for storing buyer's product specification information. The database can include information on product name, product specifications, price, area, date, etc, input by the buyer.

The server computer 11 registers such product information from buyers in the database and forms Universal Resource Locators (URLs) for processing the auction for the buyers' products in step 23. That is, an area in which the reverse auction for a buyer is processed on-line is set, and the auction for a predetermined product is conducted.

The server computer 11 provides buyer product information to sellers on the web so that each seller can access the information, while sending information on the product specifications of the buyers, together with the URLs for a bid, which is generated for the buyers, to the sellers who registered the same category as the buyers selected, via E-mail and the like in step 24.

The server computer 11 can conduct a normal auction as well. In this case, the server computer 11 can compare a product unsold in the normal auction with product specifications provided by buyers, and then

can send product information which can attract buyers, via E-mail and the like, to promote effective purchases.

When a seller wants to make a bid in response to the product specifications of a buyer, the seller sends his product specification information to the buyer. At this time, the seller sends the information to the URL for a bid to the buyer. The server computer 11 stores seller's information sent to the URL in step 25.

FIG. 3C is an example of a database for storing product information of the seller who makes a bid for the product of a predetermined buyer.

10 The seller makes a bid by providing detailed product information, including product specifications, price, sales area, delivery dates, etc., corresponding to the requirements of the buyer. This seller's product information is provided only to corresponding buyers, and not to other buyers.

Checking sellers' product information, the buyer decides on a product which best meets his specifications in step 26. The closing of an auction can be determined by a predetermined deadline or by the time when the buyer decides to purchase. Though the buyer expressed his intention to purchase once, the purchase can be canceled when there is a predetermined reason, and then the above-described auction process 20 can be resumed.

For the product which the buyer decided to buy, various methods for payment, including Internet banking and the like, can be used. Here, the payment can be sent to the server computer operator, and the server computer operator can pay the money excluding a predetermined fee to the seller. Through this process, payment can be made safely after deciding 25 the purchase.

The present invention may be embodied in a code, which can be read by a computer, stored on a computer readable recording medium. The computer readable recording medium may be any kind on which computer readable data may be stored.

30 The computer readable recording media may be storage media such

as magnetic storage media (e.g., ROM's, floppy disks, hard disks, etc.), optically readable media (e.g., CD-ROMs, DVDs, etc.), or carrier waves (e.g., transmissions over the Internet). Also, the computer readable recording media can be scattered on computer systems connected through 5 a network and can store and execute a computer readable code in a distributed mode.

Industrial Applicability

As described above, in the reverse auction processing method 10 according to the present invention, after a buyer provides the specifications of the product he wants to buy, sellers provide products to be reverse auctioned in a cyber area which is for the auction, and then the buyer can purchase a product which best meets the specifications the buyer wants, among the products. Therefore, an auction for a product is conducted in 15 a separate cyber area for the buyer's product specifications, and the buyer can choose a product with more appropriate specifications at a cheaper price.

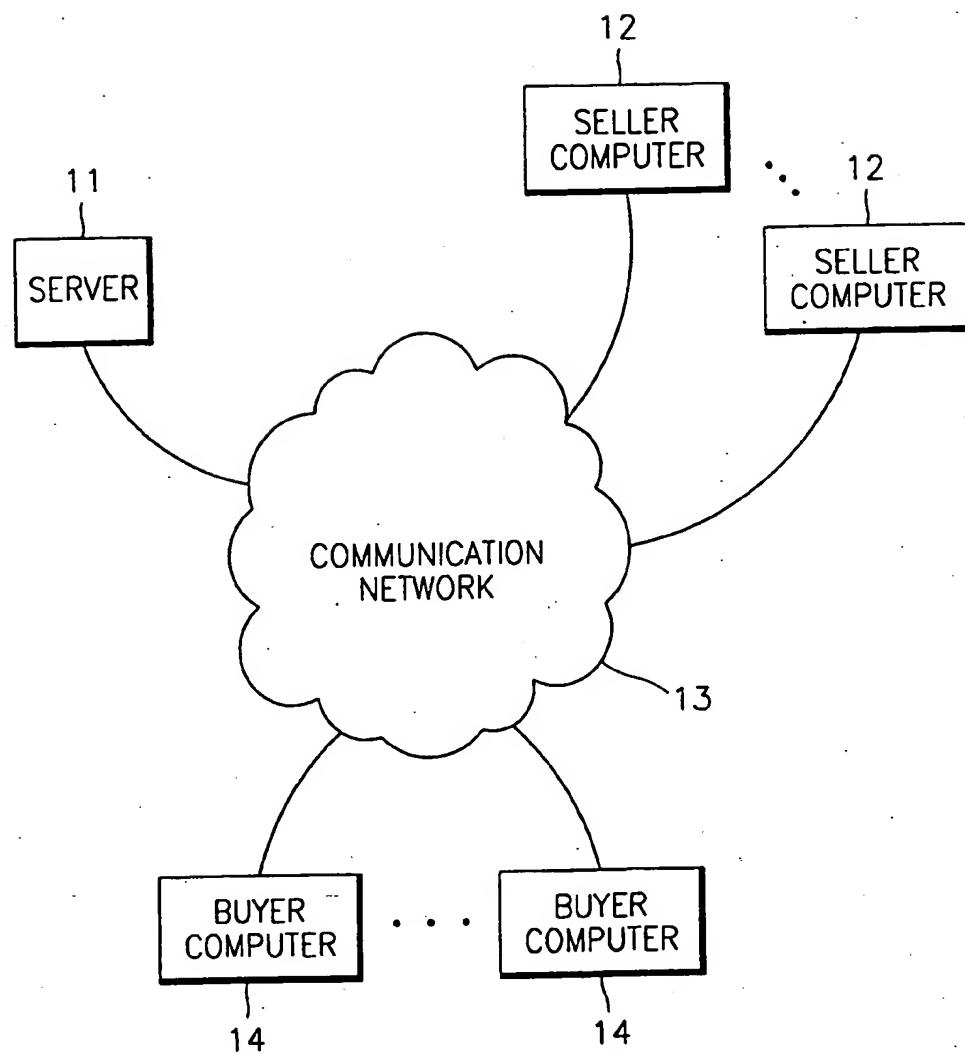
What is claimed is:

1. A reverse auction processing method for an auction which is conducted through a communication network, the method comprising the steps of:
 - 5 at least one buyer registering product purchase information, including the specifications of a product the buyer wants to buy, in a server computer;
 - the server computer giving notices corresponding to the product purchase information of the buyer to at least one seller computer;
 - 10 setting an area in the server computer for a bid to the buyer;
 - the seller making a bid by registering sales bid information, including the specifications of a product to be sold, in the area for the bid; and
 - the buyer deciding whether or not to purchase a product, after checking the sales information of sellers registered in the area for the bid.
- 15 2. The reverse auction processing method of claim 1, further comprising the steps of:
 - the server computer receiving registration of product sales information, including the specifications of a product which can be sold,
 - 20 from the seller; and
 - sending product purchase information corresponding to the product sales information to the registered sellers.
- 25 3. The reverse auction processing method of claim 1, further comprising the step of:
 - the server computer providing information on a product, which meets the specifications of a product provided by the buyer, among unsold products remaining from normal auctions, to the buyer.
- 30 4. The reverse auction processing method of claim 1, further comprising the step of:

paying for the purchase of the product which the buyer has decided to buy.

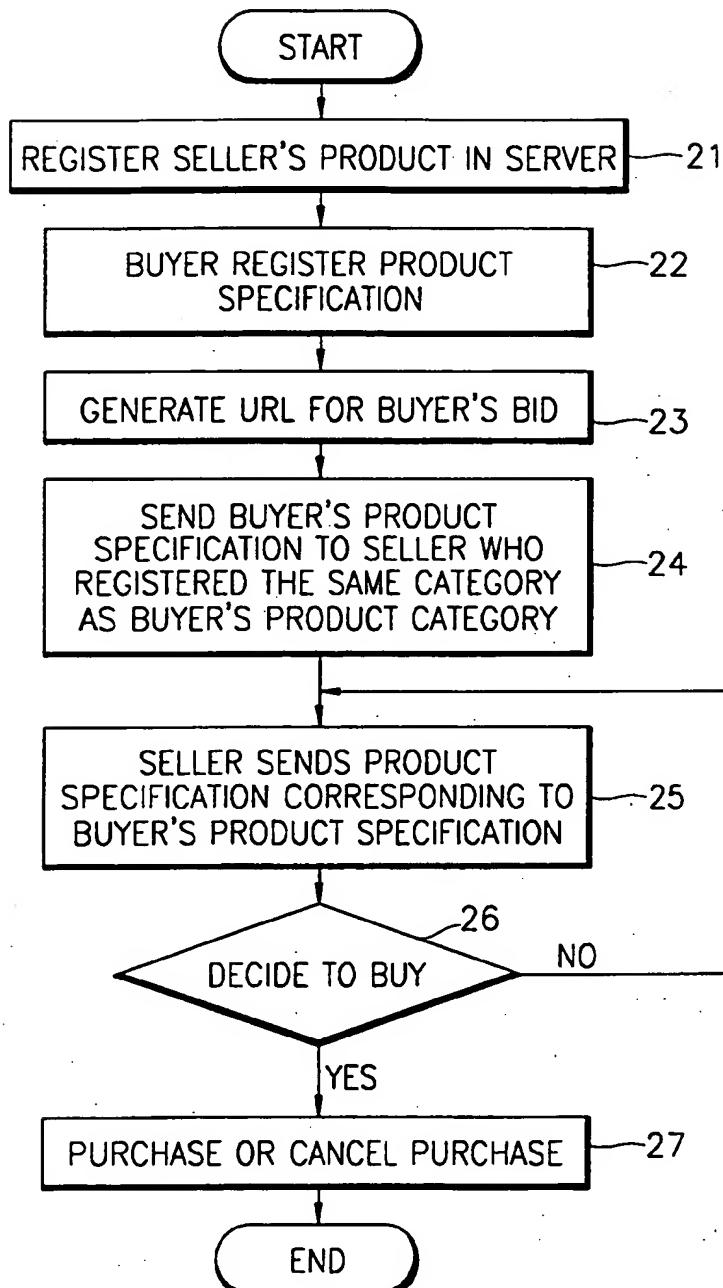
5. The reverse auction processing method of claim 4, wherein
5 the buyer who decided to buy the product pays money for the purchase of the product to the server computer operator through the communication network, and the server computer operator pays a predetermined amount of money to the corresponding seller.

10 6. A computer readable recording medium which stores a program for executing the reverse auction processing method of any one of claims 1-5.

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FIG. 1

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FIG. 2



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FIG. 3A

SELLER	PRODUCT	CATEGORY	SPECIFI-CATION	PRICE	SALES AREA	AUCTION CLOSING DATE
S1	COMPUTER BOOK	C1 C2				
S2	FURNITURE	C3				
S3	COMPUTER FURNITURE	C1 C3				

FIG. 3B

SELLER	PRODUCT	CATEGORY	SPECIFI-CATION	PRICE	AREA	DATE
B1	COMPUTER	C1				
B2	FURNITURE	C3				

FIG. 3C

SELLER	PRODUCT	CATEGORY	SPECIFI-CATION	PRICE	SALES AREA	DELIVERY DATE
S1						
S3						

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR00/01220

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 G06F 17/60

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 10-320470 A (NTT DATA) 4 DECEMBER 1998 See abstract	1 - 6
Y	US 5794207 A (WALKER ASSET MANAGEMENT. LTD) 11 AUGUST 1998 See whole claims	1 - 6

Further documents are listed in the continuation of Box C.

See patent family annex.

- * Special categories of cited documents:
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Date of the actual completion of the international search

09 FEBRUARY 2001 (09.02.2001)

Date of mailing of the international search report

12 FEBRUARY 2001 (12.02.2001)

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